

ABSTRACT

A method of casting a metal ingot having the steps of delivering molten metal to a direct chill mold, forming a solidified shell of metal, applying a coolant to a surface of the shell as it emerges from the mold, and withdrawing a solidified ingot from the mold. The coolant contains an oxidation inhibitor for increasing the rate of heat transfer from the solidifying metal compared to a coolant not containing the oxidation inhibitor to produce an ingot which is resistant to cracking.